

IN THE CLAIMS:

Please note that all claims currently pending and under consideration in the referenced application are shown below. Please enter these claims as amended. This listing of claims will replace all prior versions and listings of claims in the application.

Claims 1-12 (withdrawn)

Claim 13 (currently amended): A method of screening for drug candidates useful in treating depression ~~resulting from an alteration in APAF1~~, said method comprising: (1) measuring the level of the biological activity of a wild-type or mutant APAF1, or a homolog, derivative, or fragment thereof, in both the presence of a drug and the absence of said drug, wherein if the level of the biological activity is less in the presence of said drug than in the absence of said drug then said drug is a drug candidate for treating depression and (2) further testing said drug candidate in a depression model.

Claim 14 (original): The method of claim 13 wherein said biological activity is the ability to form a protein:protein interaction.

Claim 15 (currently amended): The method of claim 13 wherein said mutant APAF1, or homolog, derivative, or fragment thereof, is selected from the group consisting of: (a) a substitution at amino acid position 450; (b) a substitution at amino acid position 465; (c) a substitution at amino acid position 777; (d) a substitution at amino acid position 782 ~~substituted~~; (e) a substitution at amino acid position 953; (f) a substitution at amino acid position 415; (g) a substitution at amino acid position 357; (h) a substitution at amino acid position 479; and ~~(f)~~ (i) a substitution at amino acid position 625, all of which are in reference to SEQ ID NO:2.

Claim 16 (currently amended): The method of claim 13 wherein said mutant APAF1, or homolog, derivative, or fragment thereof, is selected from the group consisting of: (a) Cys at position 450 substituted with Trp; (b) Gln at position 465 substituted with Arg; (c) Glu at position 777 substituted with Lys; (d) Asn at position 782 substituted with Thr; (e) Thr at position 953 substituted with Ala; (f) Leu at position 415 substituted with Pro; (g) Ser at position 357 substituted with Leu; (h) Asp at position 479 substituted with Glu; and ~~(f)~~ (i) Glu at position 625 substituted with Ala, all of which are in reference to SEQ ID NO:2.

Claim 17 (original): The method of claim 13 wherein said mutant APAF1, or homolog, derivative, or fragment thereof, comprises the amino acid sequence as set forth in SEQ ID NO:3.

Claim 18-20 (withdrawn)

Claim 21 (new): The method of claim 13, wherein said biological activity is apoptosome activation.